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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,776	08/07/2001	Tetsuji Togawa	2001-1103	2271

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EXAMINER

ROSE, ROBERT A

ART UNIT

PAPER NUMBER

3723

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/922,776

Applicant(s)
Togawa et al

Examiner
Robert Rose

Art Unit
3723



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jun 26, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above, claim(s) 47-49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-46, 50, and 51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 3723

DETAILED ACTION

1. Applicant's election without traverse of Group I in Paper No. 5 is acknowledged.
2. Claims 47-49 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 5.
3. Claim 6, and 14-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 6, line 1 the phrase "said transfer structure" is without antecedent support in claim 1. The scope of the claim is rendered indeterminant since it is not clear whether the "transfer structure" of claim 6 is further limiting on "a transfer robot", or intends to claim additional structure. In claims 14 and 15, line 1 applicant recites "a transfer robot", however it is unclear whether this is the same transfer robot as recited in claim 12, or whether this is intended to be a second transfer robot.
4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
5. Claims 1-16, 23-29, 32-38, 41 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Oishi et al. Oishi et al disclose an apparatus for polishing a wafer comprising all of the subject matter set forth in applicant's claims above. A wafer is delivered from a

Art Unit: 3723

cassette(16) to a pusher(6) by a transfer system in the form of pair of robot arms(2)(4), which also inverts the wafer. The wafer is then picked up by a top ring(20) of a polishing arm and applied to a polishing pad(22). After polishing, the wafer is delivered back to the pusher by the top ring, where the wafer is rinsed. The wafer is then delivered to a plurality of cleaning units including wet cleaning stations(23)(24), and a spin drying station(25) before being delivered by the transfer system to a storage cassette. The wafer is again inverted at the cleaning station after polishing. Drying section(25) is read as a cleaning unit, since residual particles are cleaned from the surface by the force of a flowing gas directed at the wafer surface.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 17-21, 30-31, 39-40, and 42-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oishi et al. To provide additional serial cleaning units along the transfer path in the apparatus of Oishi et al to clean the workpiece in successive stages, to achieve a progressively cleaner workpiece, would have been at most an obvious duplication of parts to those of ordinary skill in the art. With regard to claim 21, to consolidate two cleaning units into one by providing a conventional cleaning device for both upper and lower sides of the wafer at a single cleaning unit, thus eliminating the need for a turnover device, would have been obvious to those of ordinary skill in the art.

Art Unit: 3723

8. Claims 22, and 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oishi et al in view of Cronkhite et al. Oishi et al disclose an apparatus for polishing and cleaning a wafer comprising substantially all of the subject matter of claims 22, and 50-51, except for the recitation of a second polishing unit for secondary polishing of the wafer. Cronkhite et al discloses a wafer polishing apparatus comprising a primary polishing pad and secondary polishing pad serviced by a top ring. To provide a secondary polishing turntable and polishing pad in Oishi et al in order to perform the polishing in two steps for better control of the polishing process would have been obvious as taught by Cronkhite et al.
9. Any inquiry concerning this communication should be directed to Robert Rose at telephone number (703) 308-1360.

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September 5, 2003.

ROBERT A. ROSE
PRIMARY EXAMINER
ART UNIT 323

